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| **COVERING BOTH GLE’S AND CCSS**  **(State correlation is not a perfect match-What makes them the same….what makes them different?)**  3.1.2 Make and test conjectures about the angle and side relationships to determine that similar figures have congruent angles and corresponding sides proportional and congruent figures have congruent angles and sides.  **CC.8.G.2** Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.  **CC.8.G.4** Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.  3.1.3 Construct and/or examine right triangles and make and test conjectures about the relationships of the angles and sides and develop the Pythagorean Theorem.  **CC.8.G.6** Explain a proof of the Pythagorean Theorem and its converse.  3.1.4 Apply side and angle relationships in geometric figures to solves problems including the Pythagorean theorem and similar figures.  **CC.8.G.5** Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the three angles appear to form a line, and give an argument in terms of transversals why this is so.  **CC.8.G.7** Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.  **CC.8.G.8** Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.  3.2.5 Use a coordinate plane to make and test conjectures about changes in the coordinates of the vertices of polygons as a result of a transformation (translation and/or reflection) and describe the results in writing.  **CC.8.G.1** Verify experimentally the properties of rotations, reflections, and translations:  a. Lines are taken to lines, and line segments to line segments of the same length.  b. Angles are taken to angles of the same measure.  c. Parallel lines are taken to parallel lines.  **CC.8.G.3** Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinates. |
| **COVERING BOTH GLE’S AND CCSS AND SCIENCE INTEGRATION – N/A** |
| **GLE’s but not CCSS**  3.1.1 Determine the effect of scale factors (resulting in similar figures) on the perimeters and areas of two-dimensional shapes and the surface areas and volumes of three-dimensional solids.  **CC.7.G.1** Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.  3.1.3 Construct and/or examine right triangles and make and test conjectures about the relationships of the angles and sides and develop the Pythagorean Theorem.  **CC.7.G.2** Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.  3.3.8 Understand and describe in writing that measurement tools, measurements and estimates of measures are not precise and can affect the results of calculations. |
| **CCSS but not GLE’s – None** |